

# METHOD AND APPARATUS FOR ESTIMATING DELAY AND JITTER BETWEEN NETWORK ROUTERS

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## 5 ABSTRACT

A delay measurement technique according to an embodiment according to the present invention is based on the precept, ascertained by the inventors, that a link between network nodes will often contribute to the delay encountered between several different pairs of network nodes. Such a technique identifies the path between each  
10 pair of nodes by a list of links that form the path. Paths that are orthogonal are treated as being necessary for describing the delays encountered between nodes, and, once the requisite set of orthogonal paths has been derived, all other paths can be described in terms of one or more of these orthogonal paths. Such a technique also lends itself to matrix representation of the paths, and the use of matrix manipulation techniques in  
15 deriving delay and jitter.